



PTO/SB/21 (08-03)

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| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/664,513 |
| | Filing Date | September 16, 2003 |
| | First Named Inventor | Marc K. HELLERSTEIN |
| | Art Unit | 1655 |
| | Examiner Name | P. Martin |
| Total Number of Pages in This Submission | 9 + 37 refs | Attorney Docket Number 416272003700 |

ENCLOSURES (Check all that apply)

| | | |
|---|--|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form (in duplicate for fee processing - 2 pages) <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement w/ Form PTO/SB/08a/b (6 pages) <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1. One copy of 16 Cited References 2. Return Receipt Postcard |
| Remarks | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | |
|-------------------------|--|
| Firm or Individual name | MORRISON & FOERSTER LLP (Customer No. 20872) Michael R. Ward - 38,651 |
| Signature | <i>Michael R. Ward</i> |
| Date | 3/07/06 |

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 3/7/06 Signature: *Leah Kjellen* (Leah Kjellen)



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|---|--|--------------------------|---------------------|
| Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). FEE TRANSMITTAL For FY 2005 | | Complete if Known | |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27 | | Application Number | 10/664,513 |
| TOTAL AMOUNT OF PAYMENT (\$) | | Filing Date | September 16, 2003 |
| 180.00 | | First Named Inventor | Marc K. HELLERSTEIN |
| | | Examiner Name | P. Martin |
| | | Art Unit | 1655 |
| | | Attorney Docket No. | 416272003700 |

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|---|---|
| METHOD OF PAYMENT (check all that apply) | |
| <input type="checkbox"/> Check | <input type="checkbox"/> Credit Card |
| <input type="checkbox"/> Money Order | <input type="checkbox"/> None |
| <input type="checkbox"/> Other (please identify): | |
| <input checked="" type="checkbox"/> Deposit Account | Deposit Account Number: 03-1952 |
| | Deposit Account Name: Morrison & Foerster LLP |
| For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) | |
| <input checked="" type="checkbox"/> Charge fee(s) indicated below | <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee |
| <input checked="" type="checkbox"/> Charge any additional fee(s) or any underpayment of fee(s) under 37 CFR 1.16 and 1.17 | <input checked="" type="checkbox"/> Credit any overpayments |

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|---|--------------------|---------------------|---|----------------------|----------------------------------|----------------------|-----------------------|
| FEE CALCULATION | | | | | | | |
| 1. BASIC FILING, SEARCH, AND EXAMINATION FEES | | | | | | | |
| | FILING FEES | | SEARCH FEES | | EXAMINATION FEES | | |
| | | <u>Small Entity</u> | | <u>Small Entity</u> | | <u>Small Entity</u> | |
| Application Type | Fee (\$) | Fee (\$) | Fee (\$) | Fee (\$) | Fee (\$) | Fee (\$) | Fees Paid (\$) |
| Utility | 300 | 150 | 500 | 250 | 200 | 100 | 0.00 |
| Design | 200 | 100 | 100 | 50 | 130 | 65 | |
| Plant | 200 | 100 | 300 | 150 | 160 | 80 | |
| Reissue | 300 | 150 | 500 | 250 | 600 | 300 | |
| Provisional | 200 | 100 | 0 | 0 | 0 | 0 | |
| 2. EXCESS CLAIM FEES | | | | | | | |
| | | | | | | | <u>Small Entity</u> |
| Fee Description | | | | | | | Fee (\$) |
| Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent | | | | | | | 50 |
| Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent | | | | | | | 200 |
| Multiple dependent claims | | | | | | | 360 |
| | | | | | | | 180 |
| Total Claims | | Extra Claims | Fee (\$) | Fee Paid (\$) | Multiple Dependent Claims | | |
| - 20 = | | x | = | 0.00 | Fee (\$) | | Fee Paid (\$) |
| | | | | | | | 0.00 |
| Indep. Claims | | Extra Claims | Fee (\$) | Fee Paid (\$) | | | |
| - 3 = | | x | = | 0.00 | | | |
| 3. APPLICATION SIZE FEE | | | | | | | |
| If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | | | | | | | |
| Total Sheets | | Extra Sheets | Number of each additional 50 or fraction thereof | | Fee (\$) | Fee Paid (\$) | |
| - 100 = | | /50 | (round up to a whole number) x | | = | 0.00 | |
| 4. OTHER FEE(S) | | | | | | | |
| | | | | | | | Fees Paid (\$) |
| Non-English Specification, \$130 fee (no small entity discount) | | | | | | | 0.00 |
| Other: 1806 Submission of an Information Disclosure Statement | | | | | | | 180.00 |

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| SUBMITTED BY | | | |
| Signature | <i>Michael R. Ward</i> | Registration No. (Attorney/Agent) | 38,651 |
| Name (Print/Type) | Michael R. Ward | Telephone | (415) 268-6237 |
| | | Date | 3/07/06 |

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Dated: 3/7/06

Signature: (Leah Kjellen)

(Leah Kjellen)

Patent

Docket No. 416272003700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Marc K. HELLERSTEIN

Examiner: P. Martin

Group Art Unit: 1655

Serial No.: 10/664,513

Filing Date: September 16, 2003

For: BIOCHEMICAL METHODS FOR
MEASURING METABOLIC FITNESS
OF TISSUES OR WHOLE ORGANISMS

**SUPPLEMENTAL INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §1.97 and § 1.98, Applicant submits for consideration in the above-identified application the documents listed on the attached Form PTO/SB/08a/b. Copies of foreign documents and non-patent literature are submitted herewith. The Examiner is requested to make these documents of record.

This Supplemental Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.

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- ☐ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.
- ☒ **After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.**
- ☐ A fee is required. A check in the amount of ___ is enclosed.
- ☒ **A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.**
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above; accordingly, no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a check in the amount of ___ is enclosed.
- ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.)

Applicant would appreciate the Examiner initialing and returning the Form PTO/SB/08a/b, indicating that the information has been considered and made of record herein.

The information contained in this Supplemental Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, Applicant petitions for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petition and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **416272003700**.

Supplemental Information Disclosure Statement

Dated: 3/07/06

Respectfully submitted,

By Michael R. Ward

Michael R. Ward

Registration No.: 38,651

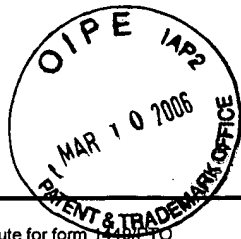
MORRISON & FOERSTER LLP

425 Market Street

San Francisco, California 94105-2482

Telephone: (415) 268-6237

Facsimile: (415) 268-7522



ALTERNATIVE TO PTO/SB/08a/b (07-05)

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|---|---|----|--------------------------|------------------------|--------------|
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | Complete if Known | | |
| | | | Application Number | 10/664,513 | |
| | | | Filing Date | September 16, 2003 | |
| | | | First Named Inventor | Marc K. HELLERSTEIN | |
| | | | Art Unit | 1655 | |
| | | | Examiner Name | P. Martin | |
| Sheet | 1 | of | 3 | Attorney Docket Number | 416272003700 |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
| | 1. | US-4,065,552 | 12-27-1977 | Costa | |
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| | 12. | US-5,597,548 | 01-28-1997 | Sherry et al. | |
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| | 15. | US-6,610,270 | 08-26-2003 | Ajami | |
| | 16. | US-6,625,547 | 09-23-2003 | Korzekwa et al. | |
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| | 23. | US-2006/0029549 | 02-09-2006 | Hellerstein | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|---|--------------------------------|---|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| | 24. | EP-0826377 | 11-06-2002 | Tokyo Gas Co., Ltd. | | |
| | 25. | WO-93/20800 | 10-28-1993 | Kinnunen | | |
| | 26. | WO-95/13096 | 05-18-1995 | Peptide Delivery Systems Pty. Ltd. | | |
| | 27. | WO-00/13025 | 03-09-2000 | University of Washington | | |
| | 28. | WO-00/63683 | 10-26-2000 | Target Discovery Inc. | | |
| | 29. | WO-01/84143 | 11-08-2001 | Thermo Finnigan LLC | | |

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| Examiner Signature | | Date Considered | |
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| Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 10/664,513 |
| | | | | Filing Date | September 16, 2003 |
| | | | | First Named Inventor | Marc K. HELLERSTEIN |
| | | | | Art Unit | 1655 |
| | | | | Examiner Name | P. Martin |
| Sheet | 2 | of | 3 | Attorney Docket Number | 416272003700 |

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials ⁶ | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | 30. | Australian Patent Office Search Report mailed August 26, 2005, for Singapore patent application no. SG 200500571-5, filed July 25, 2003, 5 pages | |
| | 31. | COLLINS, Michelle L. et al. (Jan. 31, 2003) "Measurement of mitochondrial DNA synthesis in vivo using a stable isotope-mass spectrometric technique," J Appl Physiol, 94: 2203-2211 | |
| | 32. | HECK, Steven D. et al. (April 1996) "Posttranslational amino acid epimerization: Enzyme-catalyzed isomerization of amino acid residues in peptide chains," Proc. Natl. Acad. Sci. USA, 93(9): 4036-4039 | |
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| | 38. | SCHEIBNER, Jurgen et al. (1993) "Bile Acid Synthesis from Newly Synthesized Vs. Preformed Cholesterol Precursor Pools in the Rat," Hepatology, 17: 1095-1102 | |
| | 39. | Supplementary Partial European Search Report mailed August 17, 2005, for European patent application no. EP 03749756.7, filed September 15, 2003, 6 pages | |

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|--------------------|--|-----------------|--|
| Examiner Signature | | Date Considered | |
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| Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> | | | | Complete if Known | |
| | | | | Application Number | 10/664,513 |
| | | | | Filing Date | September 16, 2003 |
| | | | | First Named Inventor | Marc K. HELLERSTEIN |
| | | | | Art Unit | 1655 |
| | | | | Examiner Name | P. Martin |
| Sheet | 3 | of | 3 | Attorney Docket Number | 416272003700 |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
|-----------------------|--|--------------------|--|